

OT WI 40/220...240/1A0 NFC CA LPI

OPTOTRONIC Wireless Intelligent – Casambi NFC LP I | Compact constant current LED driver – Dimmable



Product family features

- Driver with integrated CASAMBI lighting control system
- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Line voltage: 198...264 V
- Lifetime: up to 100,000 h
- Type of protection: IP20
- Integrated cable clamp for luminaire and independent installation

Product family benefits

- Small housing for flexible luminaire designs
- Versatile CASAMBI window driver due to flexible output characteristic
- Easy and fast output current setting via NFC
- Very high efficiency
- High-quality dimming of 1...100 % by amplitude dimming



Specifications are subject to changes without notice.

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Areas of application

- Suitable for downlights, spotlights and LED panels
- Suitable for use in luminaires with flexible current setting
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II

Technical data

Electrical data

Nominal input voltage	220...240 V
Mains frequency	0,50,60 Hz
Input voltage AC	198...264 V ¹⁾
Input voltage DC	176...276 V
Current set	NFC
Total harmonic distortion	< 10 % ²⁾
Power factor λ	0.70C...0.99
Protective conductor current	not relevant
Inrush current	20 A ³⁾
Max. ECG no. on circuit breaker 10 A (B)	35
Max. ECG no. on circuit breaker 16 A (B)	55
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	10...54 V ⁴⁾
U-OUT (working voltage)	60 V
Nominal output current	350...1050 mA ⁵⁾
Default output current	700 mA
Output current tolerance	± 3 %
Output ripple current (100 Hz)	< 3 % ⁶⁾
Output PSTLM	<1
Output SVM	<0.4
Nominal output power	38 W
Maximum output power	38 W ⁷⁾
Wireless protocol	Casambi Evolution
Wireless range	10 m line of sight
Radio frequency	2.4 GHz
Maximum TX power	8 dBm ⁸⁾
Galvanic isolation DALI/mains	not relevant
Galvanic isolation DALI/output	not relevant
Networked standby power	0.15 W ⁹⁾

1) Permitted voltage range

2) At full load, 220...240 V, 50 Hz / see graphs

3) $t_{width} = 25 \mu s$ (measured at 50 % I_{peak})

4) Maximum 60 V

5) ± 3 %

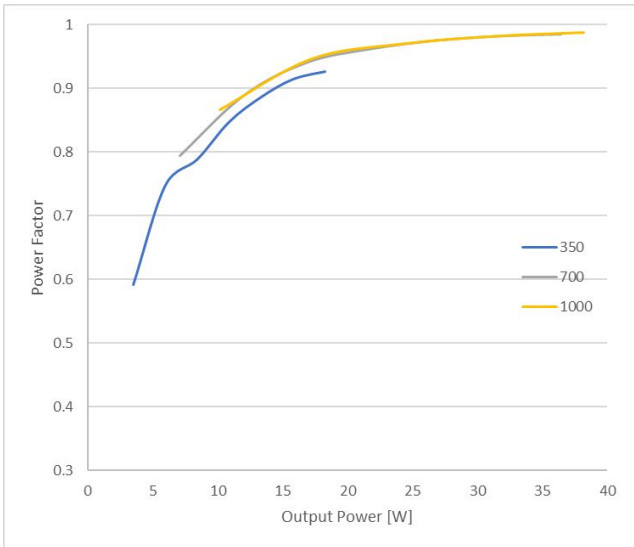
6) Ripple average at 100 Hz

7) Partial load 7...38 W

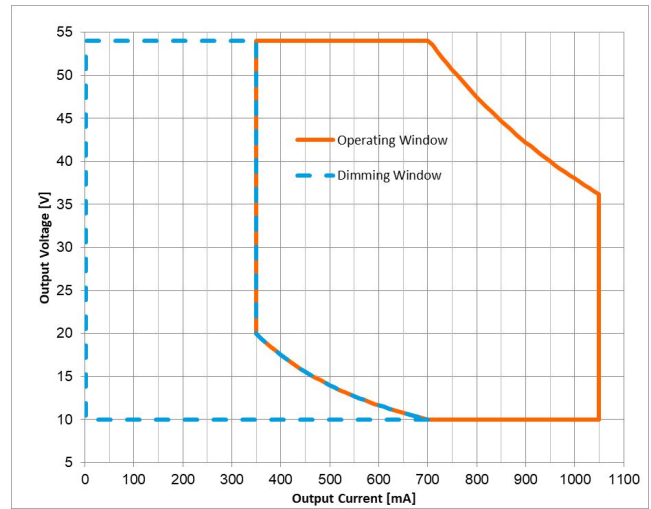
8) 2.512 mW

9) at 230 V, 50 Hz

Typical Power Factor v Load



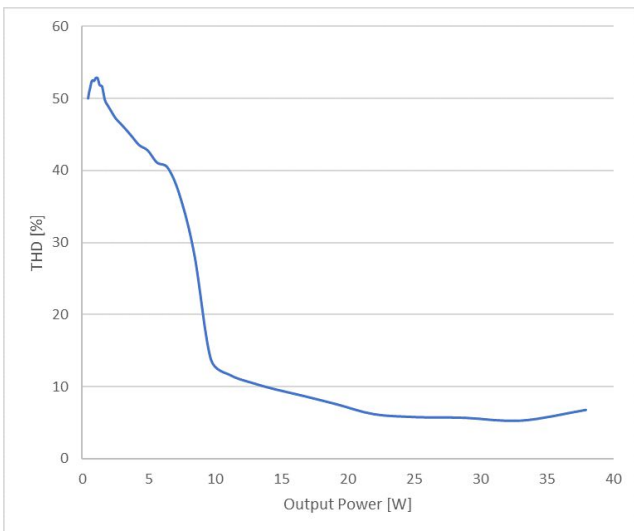
Operating Window



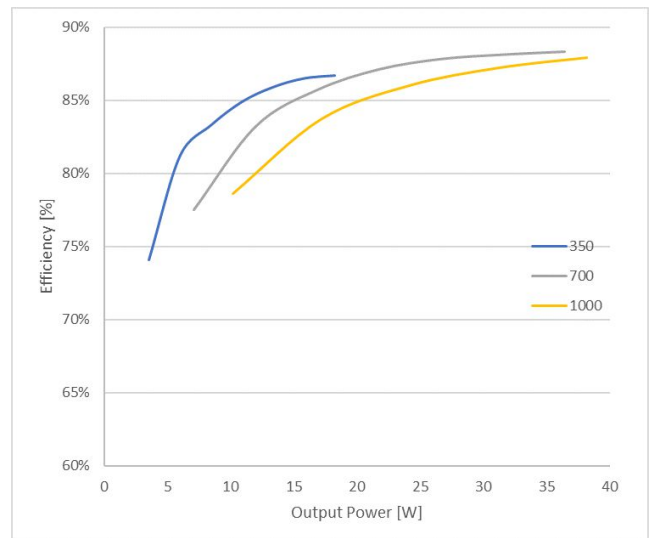
OTI DALI 40 NFC LP Typical Power Factor vs. Load

OTI DALI 40 NFC LP Operating window

Typical THD v Load



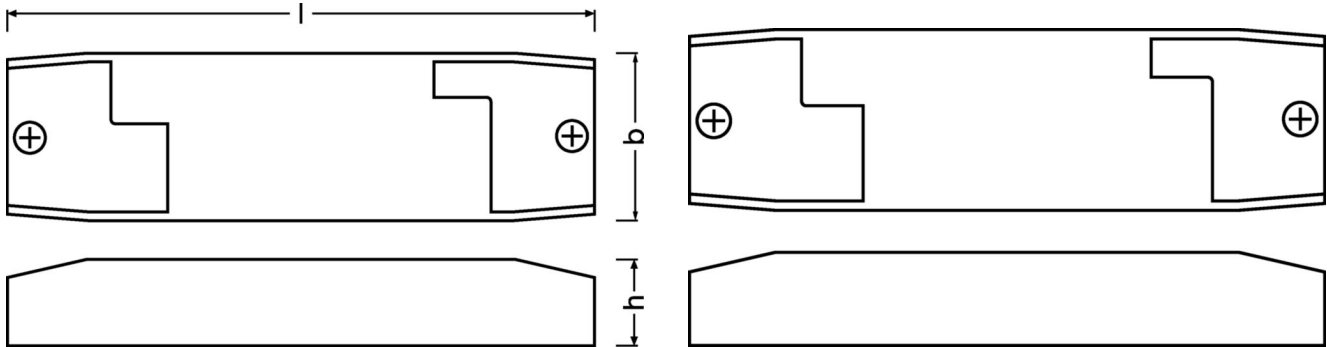
Typical Efficiency v Load 230 V 50 Hz



OTI DALI 40 NFC LP Typical THD Vs Load

OTI DALI 40 NFC LP Typical Efficiency vs. Load (230 V / 50 Hz)

Dimensions & weight



Length	150.0 mm
Width	42.5 mm
Height	22.0 mm
Mounting hole spacing, length	108.0 mm
Mounting hole spacing, width	not relevant mm
Cable cross-section, input side	0.75...1.5 mm ² ¹⁾
Cable cross-section, output side	0.5...1.5 mm ² ¹⁾
Wire preparation length, input side	7...8 mm
Wire preparation length, output side	7...8 mm
Product weight	160.00 g

1) Solid or flexible leads

Colors & materials

Casing material	Plastic
Product color	White

Temperatures & operating conditions

Ambient temperature range	-20...+45 °C
Maximum temperature at tc test point	85 °C ¹⁾
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40...+85 °C
Permitted rel. humidity during operation	5...85 % ²⁾

1) Maximum at the Tc-point

2) Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h / 100000 h ¹⁾
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1) $T_c = 85^\circ\text{C}$, 0.2% / 1,000 h failure rate / $T_c = 75^\circ\text{C}$, 0.1% / 1,000 h failure rate

Additional product data

Encapsulated	No
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Capabilities

Programming interface	NFC
Control interface	Casambi
Dimmable	Yes
Dimming interface	Bluetooth CASAMBI
Dimming range	1...100 %
Dimming method	Amplitude Modulation
DALI-2 Diagnostic Data	No
DALI-2 Energy Data	No
Constant lumen function	Programmable
Max. cable length to lamp/LED module	2.0 m ¹⁾
Suitable for fixtures with prot. class	I / II
Suitable for emergency lighting	Yes
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Number of channels	1
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
Intended for no-load operation	No
No-load proof	Yes

1) Output wires must be routed as close as possible to each other

Programming

Programming device	NFC
Tuner4TRONIC	Yes
Tuner4TRONIC Field App	No
Box programming	Yes

Programmable features

Emergency Mode	Yes
DALI-2 Luminaire Data	No
Corridor Functionality	not relevant
Dim to Dark	Yes
Soft Switch Off	Yes
Tuning Factor	Yes
Configuration Lock	Yes
Driver Guard	Yes
Emergency Mode	Yes

Certificates & standards

Approval marks – approval	CE / UKCA / ENEC / EAC / EL
Standards	Acc. to EN 61347-1 / Acc. to EN 61347-2-13 / Acc. to EN 55015 / Acc. to EN 61547 / Acc. to EN 61000-3-2 / Acc. to EN 62384 / Acc. to EN 62479 / Acc. to ETSI EN 300 328 / Acc. to ETSI EN 301 489-17 / Acc. to ETSI EN 301 489 - 1
Type of protection	IP20
Protection class	2

Logistical data

Commodity code	85044095900
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Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	22-03-2024
Primary Article Identifier	4062172228077
Declaration No. in SCIP database	In work

Additional product information

- Download Casambi app from App store or Google play. For the correct functioning of the Casambi app refer to the Casambi website: <http://www.casambi.com>.
- The Casambi App is provided to you by Casambi. OSRAM shall have no liability for the Casambi app and does not make any representations, express or implied, about the availability and/or performance of the Casambi app.
- The Casambi cloud services are provided to you by Casambi. OSRAM shall have no liability for the Casambi cloud services and does not make any representations, express or implied, about the availability and/or performance of the Casambi cloud services.
- OSRAM shall have no liability for and does not make any representations, express or implied, about the connectivity of Casambi ready products of OSRAM with any other Casambi ready products.
- There are two places in the app where you can unpair a Casambi enabled device from a network.
 1. Go to the 'Luminaires' tab and tap 'edit'. Unpair a luminaire by tapping the ("X") that will appear in the corner of the relevant luminaire icon. You can also double-tap a luminaire icon to open the "luminaire properties" screen, and then scroll down and tap 'Unpair device'.
 2. Go to the "Nearby devices" screen found under the 'More' tab. Tap on the device you wish to unpair and select 'Unpair device'. This will unpair the luminaire if you have modification (administrator) rights to the network. If you don't have the modification rights to the network that the device is paired to then you need to have access to the devices power switch to be able to unpair. Tap on the device you wish to unpair and select 'Unpair device' and the app will open the 'Unpair' screen. Tap on the 'Start' button and an orange "Time bar" will appear and start to move across the screen. During the time it takes the bar to move across the screen, flick the power switch off and back on again. This should unpair the device. If unpairing succeeds then there is a message that luminaire has been unpaired. If it does not succeed then try again but switch the power off and on again more slowly (This may be needed for devices that use an additional power supply; such as a CBU-PWM4). If unpairing continues to be unsuccessful then it is probably the case that the power switch is not correct for the device you are trying to unpair.

Download Data

File		
Certificates	PDF	▶OT ENEC 40038447 260623
CAD data 3-dim	Compressed	▶OT WI NFC CA BL LPI CAD3PDF 130722
CAD data 2-dim	Compressed	▶OT WI NFC CA BL LPI CAD2PDF 130722
CAD data	Compressed	▶OT WI NFC CA BL LPI IGS 130722
CAD data	Compressed	▶OT WI NFC CA BL LPI STEP 130722
Mandatory Publications	PDF	▶OT WI NFC LP CE 4388804 080722
Mandatory Publications	PDF	▶OT WI NFC LP UK DoC 4388806 080722
User instruction	PDF	▶OPTOTRONIC LED Power Supply

Ecodesign regulation information:

Intended for use with LED modules.

The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172228077	OT WI 40/220...240/1A0 NFC CA LPI	Shipping carton box 20 Pieces	314 x 122 x 107 mm	4.10 dm ³	3321.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.

Accessories Optional

Product description	Accessory name	Accessory code
OT WI 40/220...240/1A0 NFC CA LPI	PRH101 -USB	▶ 4055462165152
OT WI 40/220...240/1A0 NFC CA LPI	CPR30 -USB	▶ 4055462165169